

From: FSettepani@Geosyntec.com
Sent: Tuesday, September 14, 2010 3:12 PM
To: Von Pein, Rick <rvonpein@wm.com>
Cc: Whelan, Joseph <JWhelan1@wm.com>; Frey, Jesse <JFrey@wm.com>; HSharma@Geosyntec.com; matth@goodfellowbros.com; benh@goodfellowbros.com
Subject: Waimanalo: gravel sizing
Attach: waim gradations_20100914173326.pdf; OPS-01 and OPS-02.pdf

Hi Rick.

As requested, attached please find the proposed gradation. The gradation is very similar to the current gradation in Section (LCRS) of the project specifications.

As mentioned, we will:

- a) Estimate spacing of the piping to meet 1 foot of head above the liner assuming a permeability of 1×10^{-2} cm/sec which is the permeability of the Soil Cushion Layer we received from Ron Boyle (AECOM) – sample number OPS-01 in the attached .pdf.
- b) Call at about noon time (CA), 900 (HI) to discuss pipe spacing.

Please call if there are questions.

Thank you.

Fabrizio.